

## DETAILED ACTION

This Office Action responds the Amendment received on December 2, 2002 (Paper No.

8).

### *Rejections Withdrawn*

#### *Claim Objections*

The objection of claims 4-22 for being dependent on a canceled claim, in the Office Action mailed on September 27, 2002 is withdrawn in view of the Amendment received on December 2, 2002, canceling the claims.

### *Claim Rejections - 35 USC § 112*

The rejection of claims 19-23 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, in the Office Action mailed on September 27, 2002 is withdrawn in view of the Amendment received on December 2, 2002, canceling the claims.

The rejection of claims 2-35 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, in the Office Action mailed on September 27, 2002, is withdrawn in view of the Amendment received on December 2, 2002, canceling claims 1-29, and establishing the proper antecedent basis for claims 30-35.

### *Claim Rejections - 35 USC § 102*

The rejection of claims 23-28 under 35 U.S.C. 102(b) as being anticipated by Hardman (U.S. Patent No. 4,939,666, issued July 3, 1990), in the Office Action mailed on September 27,

2002 is withdrawn in view of the Amendment received on December 2, 2002, canceling the claims.

***Claim Rejections - 35 USC § 103***

The rejection of claims 24-29 under 35 U.S.C. 103(a) as being unpatentable over Hardman (U.S. Patent No. 4,939,666, issued July 3, 1990) in view of Lee et al. (U.S. Patent No. 5,241,470, issued August 31, 1993), in the Office Action mailed on September 27, 2002 is withdrawn in view of the Amendment received on December 2, 2002, canceling the claims.

***Double Patenting***

The provisional rejection of claims 2-17 and 19-29 under 35 U.S.C. 101 as claiming the same invention as that of claims 2-27 and 38 of copending Application No. 09/837,886, in the Office Action mailed on September 27, 2002, is withdrawn in view of the Amendment received on December 2, 2002, canceling the claims.

The rejection of claims 2, 6, 11, and 19-22 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 6, 11, and 18-21 of U.S. Patent No. 6,269,312, mailed on September 27, 2002 is withdrawn in view of the Amendment received on December 2, 2002, canceling the claims.

***Claim Rejections - 35 USC § 101 - Double Patenting***

The rejection of claims 6-10 and 12-17 under 35 U.S.C. 101 as claiming the same invention as that of claims 2-15 of prior U.S. Patent No. 6,188,95, in the Office Action mailed on September 27, 2002 is withdrawn in view of the Amendment received on December 2, 2002, canceling the claims.

The rejection of claim 18 under 35 U.S.C. 101 as claiming the same invention as that of claim 2 of prior U.S. Patent no. 6,269,312), in the Office Action mailed on September 27, 2002 is withdrawn in view of the Amendment received on December 2, 2002.

***Claim Objections – Necessitated by Amendment***

Claims 31-35 are objected to because they depend on a proceeding claim.  
Claim 48 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 48 has not been further treated on the merits.

***Claim Rejections - 35 USC § 112 – Necessitated by Amendment***

The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.  
Claims 44 and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 44 and 45 are indefinite for reciting the term, "said first and second sets of rotamers," which lacks proper antecedent basis. The base claim 43 appears to indicate that for each residue position (which is variable), there exists rotamers of at least two different amino acid side chains. The base claim, however, lacks the concept of first and second sets of rotamers. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 37-39 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

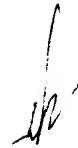
The amendment filed on December 2, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Newly added claims 37-39 recite a method step which is not supported by the original disclosure. Specifically, sub-step (a) of claims 37-39 discloses "alters at least one structure parameter." The specification supports the concept of altering at least one supersecondary structure parameter (page 10), but not the concept of altering at least one structure parameter which is open to other structural parameters not pertaining to supersecondary structure. The specification discloses:

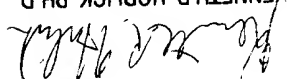
"In a preferred embodiment, the protein backbone structure is altered prior to the analysis outlined below. In this embodiment, the representation of the starting protein backbone structure is reduced to a description of the spatial arrangement of its secondary structural elements. The relative positions of the secondary structural elements are defined by a set of parameters called supersecondary structure parameters. These parameters are assigned values that can be systematically or randomly varied to alter the arrangement of the secondary structure elements to introduce explicit backbone flexibility" (pp. 10, lines 22-28).

such papers must conform with the notice published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6(d)). NOTE: If applicant does submit a paper by FAX, the original copy should be retained by applicant as to avoid the processing of duplicate papers in the Office. The Fax number is (703) 746-3172. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Young J. Kim

2/5/03



  
KENNETH R. HORLICK, PH.D.  
PRIMARY EXAMINER  
2/6/03

<b>Office Action Summary</b>		Applicant(s) MAYO ET AL.
Application No. 09/827,960	Examiner Young J. Kim	Art Unit 1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM

THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☒ This action is **FINAL**.
- 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 30-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☒ Claim(s) 30,36,40-43,46 and 47 is/are allowed.

6) ☒ Claim(s) 37-39,44 and 45 is/are rejected.

7) ☐ Claim(s) 31-35 and 48 is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

FROM : XENCOR

08/08/2003 09:28 FAX 1 415 388 3249

DORSEY & WHITNEY LLP-SF

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FAX NO. : 6262563562

Jun. 26 2003 04:00PM P13

PATENT  
Attorney Docket No. 468268-00013/A-65353-7/RFT/RMS/RMK

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group No. 1637

Examiner: Kim Young J.

CERTIFICATE OF MAILING

I hereby certify that the correspondence and enclosures are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on:

Date:

Signature

For: *Apparatus and Method for Automated Protein Design*

Filed: April 4, 2001

Serial No. 09/827,960

MAYO, et al.

In re application of

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Applicant hereby requests through it's undersigned counsel, that the individuals named below be appointed Associate Powers of Attorney and are authorized to prosecute matters in the above-captioned patent application.

Please appoint: Joyce L. Morrison, Reg. No. 31,902, and

Diane M. Tsuda, Reg. No. 47,244.

Respectfully submitted,

DORSEY & WHITNEY LLP

BY:

Robin M. Silva, Reg. No. 38,304  
Filed under 37 C.F.R. § 1.34(a)

Customer Number: 32940

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Received from <6262563562> at 6/26/03 7:41:36 PM [Eastern Daylight Time]

Please find below and/or attached an Office communication concerning this application or proceeding.

APPLICATION NO.		09 827,960		FILING DATE		04-04-2001		FIRST NAMED INVENTOR		Stephen L. Mayo		ATTORNEY DOCKET NO.		A-65353-7-RFT RMS RMR		CONFIRMATION NO.		7447	
ROBIN M. SILVA, ESQ. DORSEY & WHITNEY LLP Four Embarcadero Center Suite 3400 San Francisco, CA 94111-4187										EXAMINER KIM, YOUNG J									
ART UNIT		PAPER NUMBER																	
1637		DATE MAILED: 02 10 2003																	

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